



# City of Sebastopol

# TRAFFIC SYSTEM STUDY

1978

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#### TRANSPORTATION CONSULTANTS

July 18, 1978

R. David Malkin, Chief of Police City of Sebastopol 7120 Bodega Avenue Sebastopol CA 95472

Dear Chief Malkin:

In accordance with our current agreement, we have completed the Traffic System Study for the City of Sebastopol. This report, as submitted, is in final form including the graphics which have been reduced and made a part of the printed final report.

As stipulated in the agreement, we have prepared a traffic circulation plan, projected future traffic demands, developed a list of recommended improvements and established priorities for at least six (6) alternatives to improve traffic circulation. In addition, we completed an inventory and evaluation of all traffic control devices and this has been submitted to the City as a separate printed, final report.

This has been a very challenging undertaking for our firm and we are pleased to submit our final report. The cooperation, advice and counsel extended to us by City staff while conducting and preparing this report has been greatly appreciated. We hope that the findings presented herein will assist you in arriving at an acceptable traffic circulation plan for Sebastopol.

Very truly yours

Árnold A. Johnson

vb

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# TRAFFIC SYSTEM STUDY

FOR

THE CITY OF SEBASTOPOL

JULY 1978

CONDUCTED BY

TJKM

TRANSPORTATION CONSULTANTS
WALNUT CREEK, CALIFORNIA

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### INTRODUCTION

Our firm was retained by the City to make a detailed study of existing traffic conditions in and adjacent to the City of Sebastopol and furnish a number of alternative recommendations to improve traffic flow. This project was undertaken in cooperation with the State of California Business and Transportation Agency, Office of Traffic Safety; the National Highway Safety Administration and the U. S. Department of Transportation, Federal Highway Administration.

The City and the consultant are appreciative of efforts extended by the Office of Traffic Safety in the completion of this project. The opinions, findings and conclusions expressed in this publication are those of the authors and not necessarily those of the Office of Traffic Safety, the National Highway Traffic Safety Administration or the Federal Highway Administration.

The City of Sebastopol is a unique community with a relatively small resident population of 4600. However two state routes, Highways 12 and 116 traverse Sebastopol and intersect in the Central Business District. Sebastopol is a service area for an additional 20,000 people who live outside of the City and utilize Sebastopol for shopping and business purposes. The topography of Sebastopol is such that the two state highways along with Bodega Road, which is an extension of Highway 12, serve as the only arterial streets in the community. Consequently, these facilities have become quite congested with an increase of traffic flow each year.

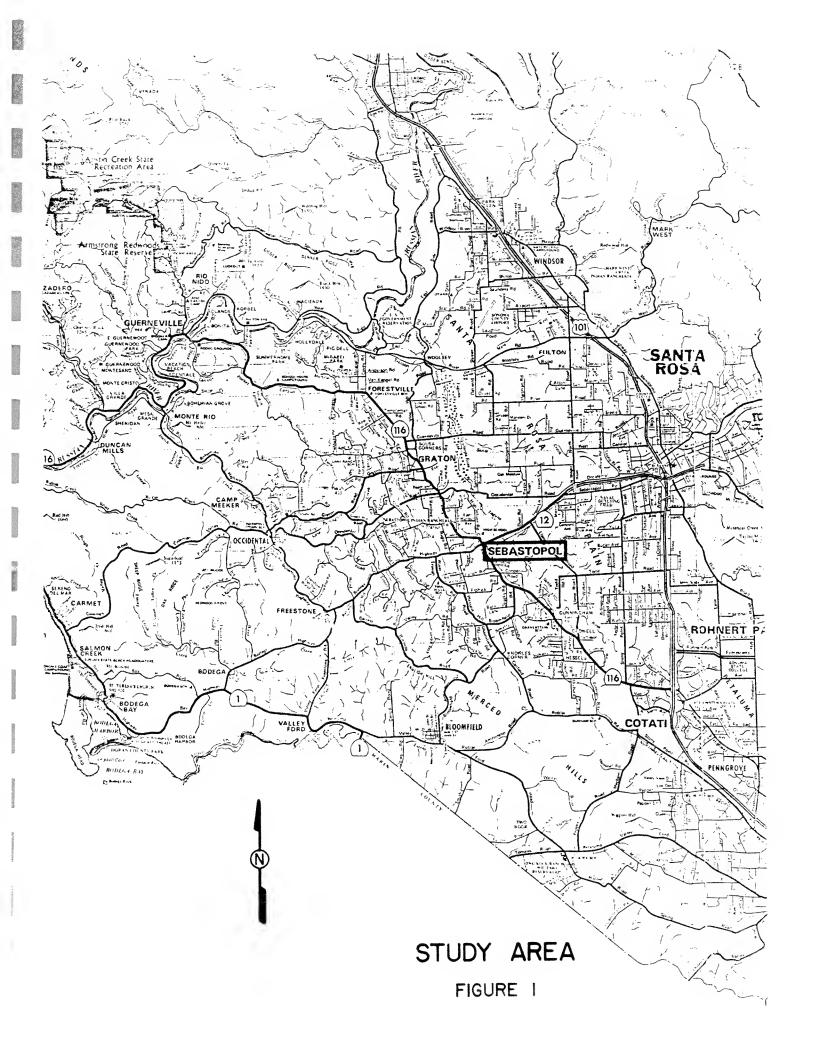
# EXISTING CONDITIONS

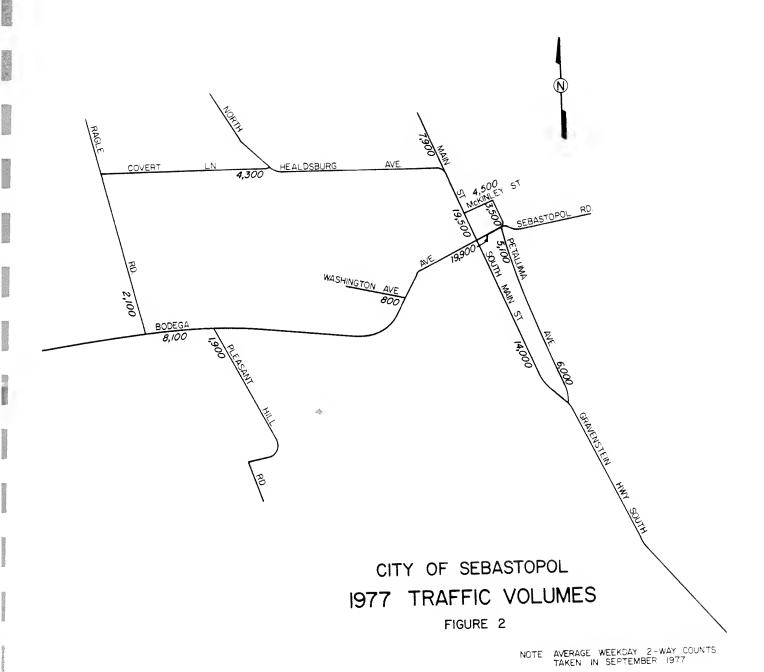
As indicated in Chapter 1, Sebastopol is a major service area for a population base of 25,000 to 30,000 people. A vicinity map of the City is shown in Figure 1 which depicts the two State highways along with other important streets in the community. The major traffic congestion point in the City occurs at the intersection of Main Street and Sebastopol Avenue - Bodega Road. Sebastopol Avenue and Main Street are State routes. The total traffic proceeding through this intersection is about 40,000 vehicles per day divided fairly equally on the two State highways. This intersection is controlled by a traffic signal and some parking has been removed near the intersection to maximize the use of available traffic capacity. However, during the evening peak hour, traffic backs up for both the thru and left turn movements and this congestion occurs on weekends as well as during the normal weekday period. There is one other traffic signal in Sebastopol at the intersection of Main Street and McKinley one block north of the State highway intersection. Another traffic congestion point is on Sebastopol Avenue at Petaluma Avenue where the geometrics and traffic volume on Sebastopol Avenue make it difficult for the cross traffic to enter the intersection.

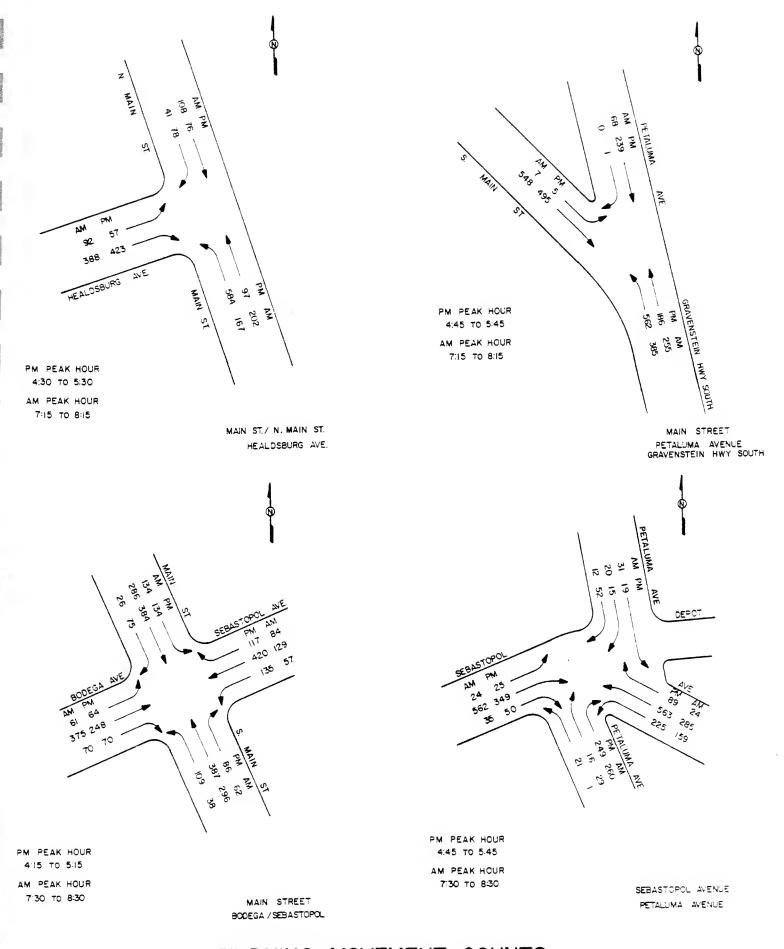
Data was collected pertaining to traffic volumes, accidents, land use and population. Twenty-four-hour traffic volume information was obtained from Sonoma County from counts taken in the City during October of 1977. During this same period, TJKM arranged for turning movement counts for the morning and evening peak hour to be taken at several intersections in the City. Existing 24-hour traffic volumes are shown in Figure 2 and the turning movement count results are shown in Figure 3. Also to help determine problem locations, accident statistics were compared for 1975, 1976 and through May 1977, and an accident summary is included in the report, as shown in Table I. (See Fig. 14 for an illustrative map of accident incidence.)

Physical observations were made in the City during peak hour conditions to assist the consultant in evaluating existing traffic conditions. As indicated earlier, the primary point of congestion is at the intersection of Main Street and Sebastopol Avenue, and the reason for this congestion is two-fold. First, the streets are not wide enough to accommodate four lanes of traffic, plus left turn storage lanes on both streets, and secondly, virtually all of the arterial street traffic in Sebastopol must pass through this intersection.

As a part of this study, an inventory was made by the consultant of all traffic control devices in the City. The results of this inventory and evaluation are included in a separate report. However, our knowledge of traffic conditions in Sebastopol was enhanced by repeatedly driving each street in the City to become familiar with existing and potential future traffic facilities.







TURNING MOVEMENT COUNTS
FIGURE 3

TABLE I
CITY OF SEBASTOPOL ACCIDENT SUMMARY
FOR PERIOD: JANUARY 1975 THRU MAY 1977

	In	Indicate One			Type	Type (Indicate Only One)	Only One)	
	Injury	Property Damage	Fatal	Ped	Bike	Single Vehicle	Two or more Vehicles	
Analy & Bonnardel	2	3		-			4	
Analy & Sunset		1					<u>, , , , , , , , , , , , , , , , , , , </u>	
Bately & Murphy	1	ъ			Н		2	
Bodega & Dutton		1				П		
Bodega & Edmund	7	2					23	
Bodega & Florence	1	4				П	4	
Bodega & Gold Ridge		1						
Bodega & High	1	10				1	10	
Bodega & Jewell	2	1				7	2	
Bodega & Lynch		1				1		
Bodega & Nelson	1	3				2	2	
Bodega & Pleasant Hill	5	11				4	12	
Bodega & Ragle	ъ	9				-	∞	
Bodega & Robinson	7	2				2	1	
Bodega & Valley View		2				1	1	

Page 2 of 7 Pages

TABLE I (CONT'D)
CITY OF SEBASTOPOL ACCIDENT SUMMARY
FOR PERIOD: JANUARY 1975 THRU MAY 1977

	II	Indicate One		Type (	Type (Indicate Only One)	nly One)
Location	Injury	Property Damage Fatal	Ped	Bike	Single Vehicle	Two or more Vehicles
Bodega & Virginia		2			2	
Bodega & Washington		2				3
Bodega & Watertrough		1				г
Brown & Depot		2			1	2
Eleanor & Fannon		1				1
Eleanor & Walker		1			٦	
Firecrest & Maytum		1			П	
Gravenstein & Cooper	1	1				1
Granvestein & Corline	3				Н	2
Gravenstein & Covert	2	23				5
Gravenstein & Firecrest		2			Н	1
Gravenstein & Florence		1				1
Gravenstein & Hutchins	2	4			Н	7
Gravenstein & Hurlburg		2				2
Gravenstein & Lynch		8			2	9

Page 3 of 7 Pages

TABLE I (CONT'D)
CITY OF SEBASTOPOL ACCIDENT SUMMARY
FOR PERIOD: JANUARY 1975 THRU MAY 1977

	I	Indicate One			Type	Type (Indicate Only One)	Only One)
Location	Injury	Property Damage	Fatal	Ped	Bike	Single	Two or more Vehicles
Gravenstein & Murphy		Н					1
Gravenstein & Petaluma	2	8				2	ĸ
Haydon & Pinecrest		1					1
Healdsburg & Covert	К	2					ιζ
Healdsburg & Dufrane	1	7					2
Healdsburg & Ellis		1					1
Healdsburg & Florence	2	ъ				7	22
Healdsburg & Live Oak							1
Healdsburg & Lyding	П	2			1	П	1
Healdsburg & Murphy	_	23			Н	-	2
Healdsburg & Pitt		К					8
High & Burnett						$\vdash$	
High G Calder		М					3
High & Edmund		П					
High & Maple	П	1					2

Page 4 of 7 Pages

TABLE I (CONT'D)
CITY OF SEBASTOPOL ACCIDENT SUMMARY
FOR PERIOD: JANUARY 1975 THRU MAY 1977

	In	Indicate One			Type (	Type (Indicate Only One)	nly One)	
Location	Injury	Property Damage	Fatal	Ped	Bike	Single Vehicle	Two or more Vehicles	
High & Willow	7	1		Т		П		
Huntly & Florence								
Johnson & Eddy		1				П		
Johnson & McKinley		2					2	
Leland & First		7					Н	
Leland & Robinson		П				Н		
Litchfield & Evan		Т				<b>~</b>		-
Litchfield & Hayden		Ţ					<del></del>	
Lynch & Enos		2				∺		
Lynch & Jean		1						
Lynch & McFarlane		2				2		
Main & Analy	1	3					4	
Main & Bodega	7	15				3	18	
Main & Burnett	4	7				2	6	
Main & Calder	H	1					2	

SUMMARY

TABLE I (CONT'D)
CITY OF SEBASTOPOL ACCIDENT SUMMARY
FOR PERIOD: JANUARY 1975 THRU MAY 1977

	In	Indicate One			Type	Type (Indicate Only One)	nly One)
Location	Injury	Property Damage	Fata1	Ped	Bike	Single Vehicle	Two or more Vehicle
Main & Eddy	7	2					23
Main & Fannen	7	2					23
Main & Healdsburg	7	6				Т	6
Main & Keating	2	7					6
Main & Litchfield	1	3			7	1	2
Main & Maple	2	3					4
Main & McKinley	2	10					12
Main & Palm	2						2
Main & Sebastopol	4	43			٦	20	26
Main & Walker	2	6				7	10
Main & Wallace	9	3		Π			<b>∞</b>
Main & Willow		13					12
Main & Wilton	2	4					9
MacFarland & Bellevue		1					1
MacFarland & Hayden	П						

Page 7 of 7 Pages

TABLE I (CONT'D)
CITY OF SEBASTOPOL ACCIDENT SUMMARY
FOR PERIOD: JANUARY 1975 THRU MAY 1977

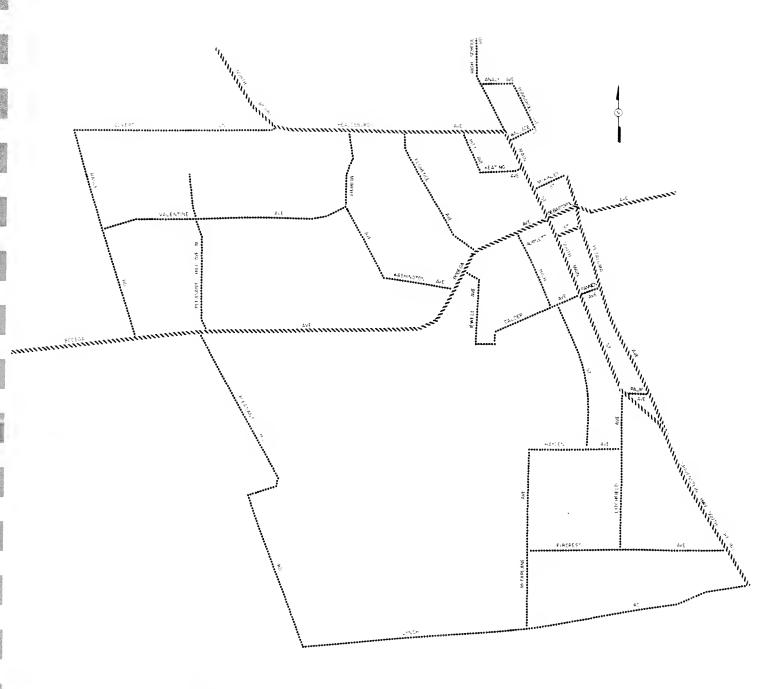
		Indicate One			Type	Type (Indicate Only One)	Only One)	AVAIRA AVAIRANTE SA
Location	Injury	Property Damage	Fatal	Ped	Bike	Single Vehicle	Two or more Vehicles	
Valentine & Washington		П						
Valentine & Zimpher	1						1	
Valley View & Gross		H					г	
Washington & Huntley		П						
Washington & Virginia	1	П					2	
Wilton & Florence	2				П		1	
Zimpher G Covert		Η						
Zimpher & Viola		П					1	

# EVALUATION OF EXISTING SYSTEM

In evaluating the existing street system in Sebastopol, the consultant drove all of the important traffic-carrying streets several times to develop a familiarity with the City. As indicated earlier, conducting the traffic control device inventory facilitated our knowledge of the existing system. One of the first steps in evaluating the existing system was to prepare a functional street classification map. This map, which depicts all major arterials, collectors and local streets in the City is shown in Figure 4. As would be expected, the major traffic-carrying routes include Highway 12 which is Sebastopol Avenue and Highway 116 which is Main Street and Healdsburg Avenue. Other important streets include Bodega Avenue and Petaluma Avenue. While there are collector street facilities in Sebastopol, they carry relatively low volumes of traffic due to the discontinuous nature of these streets.

In developing functional street classifications, major arterials generally carry traffic over longer distances than collectors and serve major traffic generators. Collectors are the link between local streets and arterials and are generally not over one mile in length. The type of street classification is not directly related to the traffic volume although major arterials usually are the higher volume streets. In most cases collectors need not handle more than two lanes of traffic and this would be true for the City of Sebastopol.

A capacity analysis was conducted at the intersection of Sebastopol Avenue and Main Street which is the primary traffic congestion point in the City. In determining capacity, it is related to the level of services provided to any particular facility. For definition purposes some explanation is given regarding the level of service in relation to intersection capacity. The service volume is the level of traffic that the intersection can serve depending on traffic conditions. There are six (6) levels of service: A to F (see Table II) with level A being similar to the free flow of a freeway under low volume conditions and level of service E being the maximum number of vehicles that can proceed through an intersection. Level of service C, which is the design level, is the condition that occurs when less than 30% of the vehicles passing through an intersection are delayed by more than one signal cycle. Level D occurs when more than 30% but less than 70% of the vehicles are delayed by more than one signal cycle. Level of service F is when traffic is stopped and moves under forced flow conditions. For purposes of this analysis, level of service C, which equals the practical capacity or design capacity of the roadway was used as an acceptable traffic flow condition for Sebastopol. The capacity for the intersection of Sebastopol Avenue and Main Street was calculated out to be level of service D, and presents a capacity deficiency in relation to the desired level of service C that should exist at this intersection.



LEGEND:
..... : APTERIAL
..... = COLLECTOR

CITY OF SEBASTOPOL EXISTING STREET CLASSIFICATION

FIGURE 4

TABLE II LEVELS OF SERVICE FOR CITY STREETS

Average Overall Speed (mph)	≥25	≥20	<u>&gt;</u> 15	>10	Below 10 but moving	stop and go
Description	Free flow (relatively; some stops will occur)	Stable flow (delays not unreasonable)	Stable flow (delays significant but acceptable)	Approach unstable flow (delays tolerable)	Unstable flow (congestion not due to backups ahead)	Forced flow (jammed)
Level of Service	A	В	U	D	*ш	ĽĽ,

Level E for the downtown street as a whole cannot be considered as capacity; overall capacity is governed by the capacity of controlling intersections or other traffic flow interruptions.

SOURCE: Table 10.14, Highway Capacity Manual, Highway Research Board, 1965.

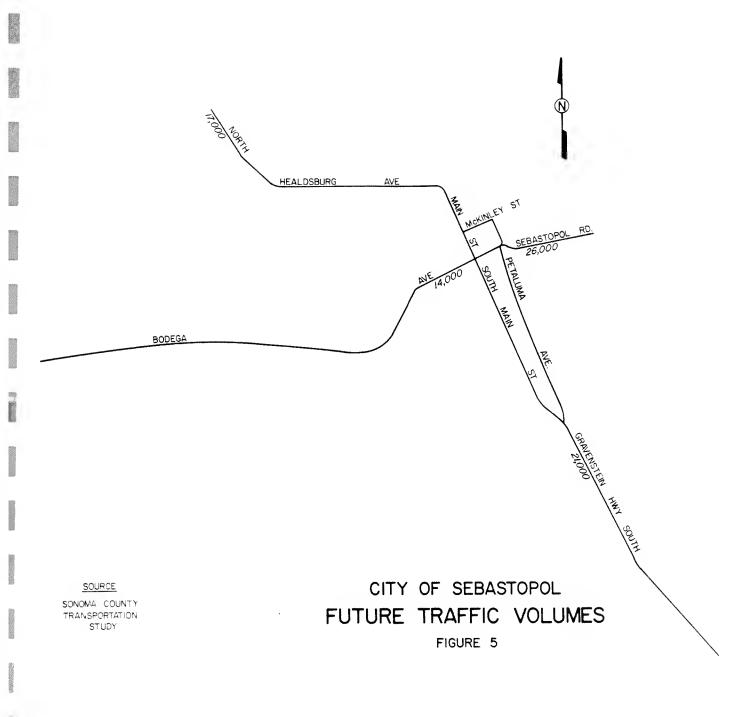
## CIRCULATION NEEDS

# Land Use and Population

Land use and population data for the Sebastopol area was obtained from the Sonoma County Transportation Study that was conducted by JHK & Associates. TJKM coordinated the information in this report with the Planning Department of Sonoma County and the City of Sebastopol City Planner. The Sebastopol Planning Area as referred to in the JHK report is predominantly agricultural and Sebastopol is noted for its apple industry and also dairies in part of the planning area. Except for the City of Sebastopol itself, most of the Planning Area is rural in nature and it is important to note that Sebastopol also handles recreational traffic proceeding to the Russian River and Bodega Bay areas. In 1973, population for the Sebasotpol Planning Area was about 18,000 with an employment of slightly over 6000. It is estimated in the Sonoma County Transportation Study that for the year 2000 the baseline population will be 28,600 with an employment level of about 6750. The transportation study also makes estimates for future traffic volumes on the major streets in Sebasotpol and these are shown later in the report. However, these future volumes were based on the land use population and employment data used in the county transportation study. The validity of this data was coordinated with Sonoma County Planning Department, who, after conducting their own land use study, confirmed that the information provided in the general county transportation study is still valid and therefore was used by TJKM in determining future traffic needs.

Circulation needs in Sebastopol can be broken down into two main areas. First, increased capacity for the arterial street system and secondly, an improved network of collector street facilities. The existing topography and land use make it undesirable to develop arterial street facilities in the southwest and northwest quadrants of the City. One of the circulation alternatives shown later in the report is for a new arterial street connecting to existing streets in the northeast quadrant of the City. Part of the southeast quadrant of the City is in the flood plain area and one of the circulation alternatives is to develop a street connecting traffic between the two State highways. In reference to collector streets, recommendations are being made to complete facilities previously planned by the City and additional collectors that will make it easier for traffic to traverse, particularly in the larger southwest and northwest quadrants of the City.

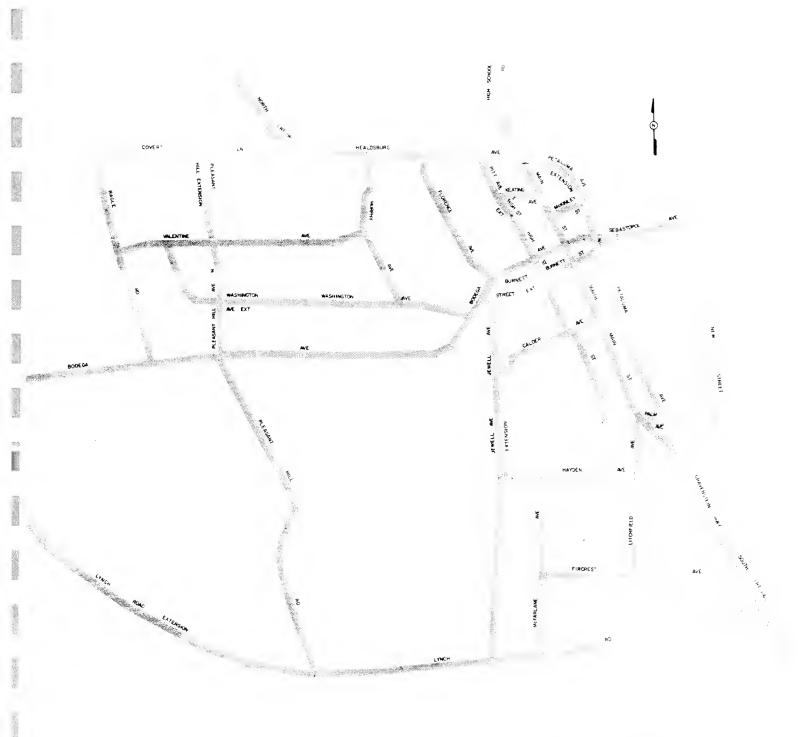
Projected future traffic volumes, as shown in the Sonoma County Transportation Study are depicted in Figure 5 of the report. Traffic counts obtained by Sonoma County in 1977 show that traffic is rapidly progressing toward the 2000 figure although this is scheduled to occur 20 years in the future. This lends further emphasis to the need for developing viable traffic circulation alternatives at this time for the City of Sebastopol.



# CIRCULATION ALTERNATIVES

During the course of this traffic engineering study for Sebastopol, several progress meetings have been held with the City to discuss and evaluate potential traffic circulation improvements. In this report all of the traffic circulation alternatives are discussed and evaluated by the consultant. However, after meeting with City staff and presenting all of this information to the Sebastopol City Council, the consultant was requested to do a more detailed analysis on four (4) of the circulation alternatives. This has been done by the consultant and is included as a part of this final report. Figure 6 is an illustration of all of the traffic circulation alternatives except for the improvement of Llano Road between Highway 116 and Occidental Road which is located entirely outside of the City of Sebastopol in the unincorporated area of the County. Also shown in this illustration are all of the collector road recommendations which are not part of the major street traffic circulation alternatives. The several traffic circulation alternatives are enumerated below.

- 1. A north-south one-way couple involving Main Street, Petaluma Avenue and McKinley Street.
- 2. An east-west one-way couple involving Sebastopol Avenue, Bodega Avenue, High Street, Burnett Street and a short section of Petaluma Avenue.
- 3. A composite of the north-south and east-west one-way circulation schemes as summarized in 1 and 2 above.
- 4. The north-south one-way streets indicated in number 1 above, along with developing a Petaluma Avenue extension north to the intersection of Main Street and Healdsburg Avenue; closing Wilton Avenue at Main Street and extending High Street to join Pitt Avenue with the closure of Pitt Avenue at Strout Avenue.
- 5. An east-west one-way couple involving the streets indicated in number 2 above along with acquiring new property to extend Burnett Street westerly to intersect Bodega Avenue near the intersection of Florence Street. Also this plan will realign Burnett Street through the vacant northwest corner parcel (forms are now in place for a new building) at Petaluma and an existing service station located at the southeast corner of Sebastopol Avenue and Petaluma Avenue.
- 6. A composite of a north-south and east-west development as proposed in numbers 3 and 4 above.
- 7. A new north-south road (formerly called Route E) between State Route 116 and intersecting Sebastopol Avenue just east of



CITY OF SEBASTOPOL

CIRCULATION ALTERNATIVES

FIGURE 6

Morris Street utilizing the flood plain area for street development.

- 8. The extension of Lynch Road westerly of Pleasant Hill Road to tie into Bodega Avenue.
- 9. A new road extension within Sonoma County jurisdiction providing a continuous route for Llano Road from Highway 116 to Occidental Road.

In arriving at the various circulation alternatives, of primary importance was the development of schemes to relieve traffic congestion on the existing State highways. As Sebastopol is a small community and relatively fully developed, a minimum of disruption to property, businesses and residences was considered desirable. For this reason, the feasibility of establishing one-way streets was fully investigated. As a minimum of additional right-of-way would be required and parking generally could remain on the street, the two one-way schemes as proposed in the circulation alternatives provide a maximum of relief to the intersection of Main Street and Sebastopol Avenue. Alternate 1 takes half of the Main Street traffic away from the critical intersection and alternate 2 removes onehalf of the Sebastopol Avenue traffic. Three other intersections, namely: Main and Burnett, Burnett and Petaluma, and Petaluma and Sebastopol are assisting in handling the traffic previously directed through one intersection. In order to accomplish this, three additional traffic signals are needed but the benefits of increased capacity far outweigh the cost of the signals. Two other alternate schemes, that of acquiring property for the Petaluma Avenue extension and property for the Burnett Street extension both complement the one-way schemes proposed. As requested by the City, a more detailed analysis of the one-way proposals has been done including the options of property acquisition for street extensions.

As a part of this study, contact was made with the California Department of Transportation since both Main Street and Sebastopol Avenue are State highways. Our contact was made with Mr. A. B. Berger, Senior Engineer, Traffic, who has jurisdiction over traffic matters on State routes in Sonoma County. It was explained to Mr. Berger that our recommendations would inloude proposed one-way schemes as outlined in this report. If state traffic is diverted to Petaluma Avenue and/or Burnett Street, it is anticipated that the traffic index (T.I.) would be 8.0, which is similar to the index now used for the state routes in Sebastopol. At such time that the City requests CalTrans to consider the one-way proposal, they would evaluate the structural capabilities of all streets that would be involved in a one-way proposal.

Shown in Table III is a summary of the various circulation alternatives listed in recommended priority order with estimated cost of development including right-of-way costs where appropriate. A detailed discussion for

TABLE III
CIRCULATION ALTERNATIVES IN PRIORITY ORDER

Total Cost \$ 180,000	165,000	915,000	682,000			
Construction \$\\$180,000\$	165,000	284,000	216,000	200,000	000,009	1,000,000
Estimated Cost Right-of-Way  \$\\$ \tag{C}\$	ı	631,000	466,000	unknown	unknown	unknown
North-south One Way	East-west One Way	North-south One way, including Petaluma Avenue & High Street Extensions	East-west One Way, including Burnett Street Extension and Realignment	New north-south road, formerly called Route "E"	Lynch Road Extension to Bodega Avenue	Llano Road Extension to Occidental Road
<b>;</b>	2	3.	4	5	. 9	7.

each of these alternatives is included in the remaining part of this report. A more complete analysis is furnished for the first four alternatives.

1. North-south one-way, involving Main Street, Petaluma Avenue and McKinely Street.

Figure 7 is a drawing showing the layout of Main Street and Petaluma Avenue as one-way streets from the intersection of Petaluma Avenue and Main Street northerly to where McKinley Street intersects Main Street. The geometrics of the intersection of Main Street and Petaluma Avenue are conducive to forming a one-way couple. Two right angle turns are required at the northerly end when connecting with McKinley Street. To facilitate the flow of traffic through this intersection, it is recommended that the northerly crosswalk across Main Street be removed as shown on the drawing.

A new traffic signal will be required at the intersection of Sebastopol Avenue and Petaluma Avenue. Parking will need to be removed on Fannen Avenue and on Palm Avenue between Main Street and Petaluma Avenue as these streets are quite narrow and improved circulation will be needed between the two one-way streets, particularly in the area near the hospital at Palm Avenue. The lane configuration for each of the one-way streets is shown in the figure. The total estimated cost for this alternative is \$180,000 broken down as follows:

Signal modification at Main & McKinley	\$ 35,000
Signal modification at Main & Sebastopol/Bodega	35,000
New traffic signal at Petaluma & Sebasotpol Avenue	65,000
Marking removals	10,000
Painting of new markings	5,000
Intersection signing and markings	30,000
TOTAL	\$180,000

2. East-west one-way, involving Sebastopol/Bodega, High Street, Burnett Street and a short section of Petaluma Avenue.

This one-way configuration can be done independently. However, it does complement the north-south Main-Petaluma one-way couple, as explained in number 1 above. Because there is no new property acquisition involved in this alternative, eastbound one-way traffic using High Street, Burnett Street and Petaluma Avenue is required to make several right-angle turns. The most critical of these is at the intersection of High Street and Bodega Avenue

where it is necessary to ease the turn by increasing the curb radius at the southwest corner. However, this will not require any additional right-of-way. Two new traffic signals are required to adequately move the traffic in this proposal: one at Main Street and Burnett Street and the other at Burnett Street and Petaluma Avenue. The signal at Burnett Street and Petaluma Avenue will operate in conjunction with the signal at Petaluma Avenue and Sebastopol Avenue as required in alternate number 1. If alternate number 1 is not placed in effect, it still would be appropriate to install the signal at Sebastopol Avenue and Petaluma Avenue for the Burnett Street/Sebastopol Avenue one-way couple to function satisfactorily. A layout showing lane configuration and geometrics is given in Figure 8. The total estimated cost for this alternative is \$165,000 broken down as follows:

Signal modification at Main and Sebastopol/Bodega New traffic signal at Main Street and Burnett Street New traffic signal at Main Street and Petaluma Avenue Revised corner turn at Bodega and High Marking removals Paint new markings Intersection signing and markings	\$	15,000 50,000 50,000 5,000 10,000 5,000 30,000
TOTAL	\$.	165,000

3. North-south one-way involving streets indicated in alternative 1 above, along with Petaluma Avenue extension closing Wilton Avenue at Main Street, extending High Street to join Pitt Avenue and closure of Pitt Avenue at Strout Avenue.

In order to graphically illustrate the layout of this alternative, particularly the street extensions, a 50-scale aerial mylar was obtained. The recommended alignment for the streets in question is shown in Figure 9. The most economical route for the Petaluma Avenue extension is to encroach on the parking lot at the southwest corner of Petaluma Avenue and McKinley Street, proceeding through the existing parking lot on the north side of McKinley Street and following the most desirable topographic features and proceeding northerly to the intersection of Healdsburg Avenue. As a matter of information, it is important to mention that the City has approved a major motel and commercial complex within property which this extension would bisect.

The loss of parking with this route would have considerable impact in this area. The recently improved City lot at the southwest corner of Petaluma and McKinley has about 96 spaces and 24 or 25% would be lost with this proposed alternate route.

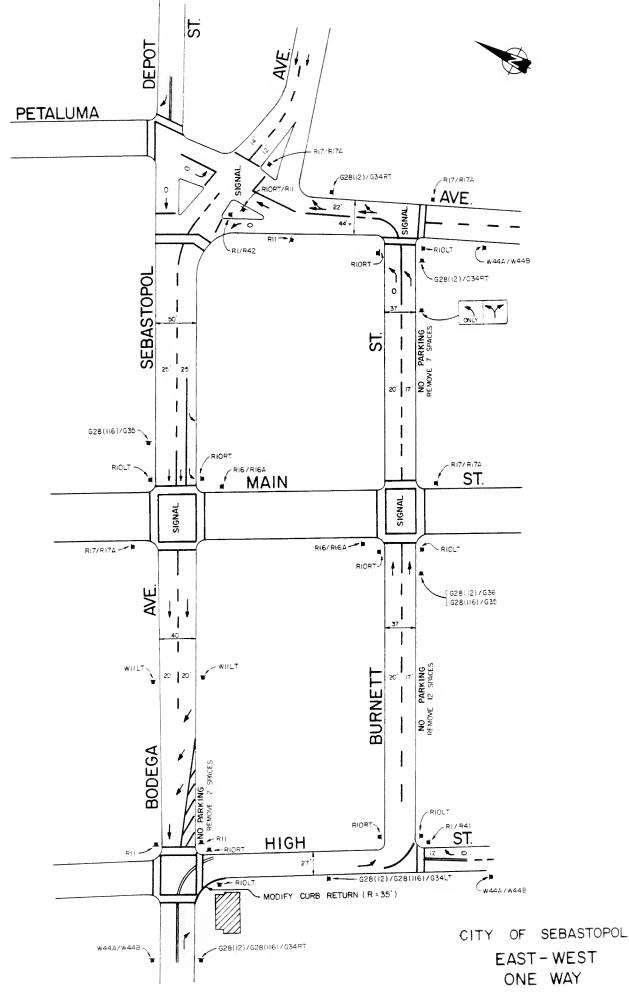


FIGURE 8

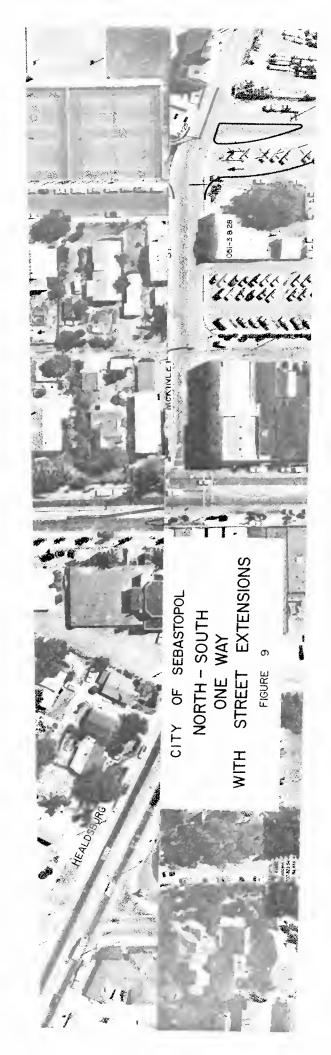


TABLE IV

IMPROVEMENT COSTS FOR PETALUMA AVENUE EXTENSION

R/W PURCHASE Lot No.	Portion	Assessed Value	Market Value
053 - 3 053 - 28	City Property	- Parking Lot	None
051 - 40	20% of 189K	\$ 37,800	\$ 75,600
051 - 18	100%	10,300	20,600
051 - 55	15% of 62.7K	9,405	18,800
051 - 48	100%	42,800	85,600
051 - 20	100%	25,500	51,000
031 - 12	100%	28,000	56,000
031 - 13	100%	26,500	53,000
031 - 14	10% of 33K	3,300	6,600
031 - 10	100%	19,000	38,000
031 - 09	100%	27,500	55,000
			\$ 460,200
ROAD IMPROVEMENT			84,700
		TOTAL	\$ 544,900

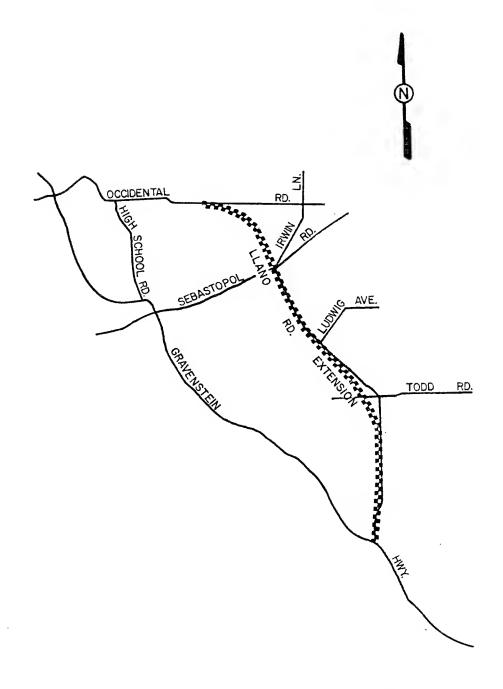
 $\label{topological} \mbox{TABLE V}$   $\mbox{IMPROVEMENT COSTS FOR HIGH STREET EXTENSION}$ 

R/W PURCHASES		4 1	W 1 . II 1
Lot No.	Portion	Assessed <u>Value</u>	Market Value 100% Increase
242 - 15	100%	\$ 65,000	\$ 130,00
242 - 10	10% of 7	70K 7,000	14,000
242 - 18 - 19 - 20		Assumed	25,000
			\$ 169,000
ROAD IMPROVEMENTS			20,000
		TOTAL	\$ 189,000

For the Ranch Mart Market and other commercial facilities there are presently 90 spaces of which 25 would be lost with the new route. This is more than 50% of the spaces now directly serving the market, and all or most of these spaces would need to be replaced for the market to remain functional. Perhaps the best solution for more parking is to deck the existing City lot, and the cost of this is reflected in the purchase price for the market parking area.

For both the Petaluma Avenue extension and the High Street Extension, the market value for each of the properties that would be affected was taken from the Sonoma County Assessor's These values were increased by 100% to be more in keeping with the actual value of the property if it were sold. The total right-of-way costs for the Petaluma Avenue extension comes to \$441,000 and is summarized in Table IV. A similar summary for the High Street extension is shown in Table V. Also shown in these tables are the road improvement costs and the total costs which are \$545,000 for the Petaluma Avenue extension and \$189,000 for the High Street extension. In order to obtain the total cost for the north-south one-way couple involving the Petaluma Avenue extension, the \$545,000 was added to the \$180,000 shown in 1, above, for a total cost of \$725,000. While the High Street extension and the closing of Wilton Avenue is not mandatory to implement the north-south one-way couple, it is desirable for improved traffic circulation in the downtown area. The implementation of the alignment shown in Figure 9 would require the relocation of some residents due to property acquisition, and the cost of this would need to be evaluated by the City at a later date and the property costs adjusted if necessary,

East-west one-way involving streets indicated in number 2 above, along with Burnett Street extension westerly to Bodega and realignment of Burnett through the northwest corner of the intersection of Petaluma Avenue and Burnett Street and the southeast corner of the intersection of Petaluma Avenue and Sebastopol Avenue. Similar to that shown for number 3 above, a 50-scale aerial mylar was used to graphically illustrate the proposed alignment and property acquisition needed to effectuate this improvement (see Figure 10). For the extension of Burnett Street westerly to Bodega, near the intersection of Florence, six properties are involved, five of which front on Bodega Avenue. The remaining parcel involves a truck maintenance facility and a residence. Again the County Assessor's records were used as a base to determine right-of-way costs. Using 100% increase for a more realistic market value of the property conservatively on the high side, the cost of the Burnett Street extension and modifications at the east end at Petaluma Avenue, including roadway costs are shown in Table VI with a total cost of \$517,000.



CITY OF SEBASTOPOL LLANO ROAD EXTENSION FIGURE 13

